## COASTAL IMPACT ASSISTANCE PROGRAM (CIAP) FY 2008 Tier I

- 1. PROJECT TITLE: Mini-Siphon into St. James Canal at Baytree Site
- 2. ENTITY NOMINATING THE PROJECT: St. James Parish Council

3. CONTACT INFORMATION: Mr. Jody Chenier

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4. Total CIAP Funds Requested: \$5,300,000

5. PARISH CIAP FUNDS REQUESTED: \$800,000

6. STATE CIAP FUNDS REQUESTED: \$4,500,000

7. INFRASTRUCTURE FUNDS PROPOSED: None

8. Description and Location of Project: The St. James Parish Council plans to team up with the State to build a mini-siphon over the Mississippi River levee at Baytree, La. The Parish plans to construct a siphon and drainage canal on a 63 acre tract of land from the Mississippi River to the St. James West Bank Canal. The siphon would dump freshwater into the depository canal to be built at the foot of the Mississippi River levee in Section 47 and continue through Section 49, located in T-11-S, R-16-E. The siphon and depository canal would allow freshwater into the Bayou Chevreuil wetland areas. The freshwater would provide needed nutrients and sediments that would enhance wetland restoration and improve water quality.

The freshwater diversion will take advantage of natural topography and hydrologic features to re-establish input of basic resources and circulation. This site in the upper reach of the Barataria Basin was previously examined as a possible CWPPRA site.

The proposed project would consist of two 72" diameter steel pipes that will extend from the Mississippi River, over the levee, and empty into a discharge pond. From the discharge pond, a 400 square foot channel will extend approximately 13,500 feet into the Parish cross-cut canal, which empties into Bayou Chevreuil.

9. PROJECT TYPE: Conservation, restoration, and protection of coastal areas, including wetlands.

- 10. PROJECT JUSTIFICATION: The siphon project will re-establish the input of freshwater into the Bayou Chevreuil and Lac Des Allemands areas, which are at the upper region of the Barataria Basin. Swamps in the upper Barataria Basin have been isolated from the Mississippi River for many years. The river was historically the primary source of water sediments and nutrients needed to sustain a healthy wetland area. The swamps are now dependent upon local rainfall and flooding to provide any of the nutrients and sediments they receive. Subsidence levels are moderate; and because of the lack of sediment input and low swamp productivity, there is an accretion deficit, which results in the loss of wetlands and wetland habitats. The freshwater project will increase productivity and regeneration of cypress and tupelo swamps. It will suppress poor water quality and low-dissolved oxygen levels and allow nutrient loading from the Mississippi River to be deposited in areas needed in the northern end of the Basin. This will also reduce the excessive nutrient loading from the Mississippi River into the Gulf of Mexico. Additionally, the loss of continual freshwater into Lac Des Allemands has resulted in increased salinity levels, which increases the stress of fresh water vegetation and the dominant species of bald cypress. The freshwater diversion would not only improve water quality in the lakes but would directly affect approximately 4,000 acres of cypress and tupelo swamp. This project was listed on the CWPPRA project nominee final report for PPL 10.
- 11. PROJECT COST SHARE (NON-CIAP FUNDS): The Parish will use its own equipment and labor to clear the agriculture property and prepare land for digging of the depositary canal. Additionally, the Parish will pay all costs associated with surveying and channel engineering design. The total cost of equipment and labor to clear the property is estimated at \$45,000.